

REMARKS

This Amendment amends claims 9 and 20-22 and adds new claims 28-33 in accordance with the original disclosure. Claims 9, 14-17, 20-22, and 28-33 are now pending in this application.

Support for Claim Amendments and Added Claims

Claim 9 has been amended to delete a comma and insert the word “is” prior to the bis(2,4,6-trimethylbenzoyl)-phenylphosphineoxide photoinitiator.

Each of claims 20, 21, and 22 have been amended to define the three-dimensional air-region as having areas with non-rectangular cross-sections. Support for these amendments to claims 20, 21, and 22 is found at page 10, lines 17-33 and Figure 2 of the specification.

Added claims 28, 30, and 32 (which each depend from claims 20, 21, and 22, respectively) each define the non-rectangular cross-sections as being tapered cross-sections. Support for added claims 28, 30, and 32 is found at page 10, lines 17-33; page 16, lines 6-20; page 16, line 22 through page 17, line 2; and Figure 2 of the specification.

Added claims 29, 31, and 33 (which each depend from claims 20, 21, and 22, respectively) each describe the three-dimensional air-region having areas with non-rectangular cross-sections as further having tapered corner regions. Support for added claims 29, 31, and 33 is found at page 4, lines 27-29; page 10, lines 17-33; page 17, lines 10-22; and Figures 2, 4B, and 4C of the specification.

Rejections of Claims 20-22

Claims 20-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 6,165,890 (Kohl et al.). This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Kohl et al. discloses a method of forming an air gap or gaps within a solid structure that involves: forming a patterned layer of sacrificial material over a substrate; forming a second solid layer of non-sacrificial material over the patterned layer of sacrificial material; and then applying heat to decompose the patterned sacrificial material, thereby forming an air-

gap structure having one or more air gaps enclosed therein. See column 4, line 52 through column 5, line 6 and Figures 1A through 1D of Kohl et al.

Kohl et al. discloses air-gap structures in which the air gaps have rectangular cross-sections. See, for example, drawing Figures 1A-1D, 2A-2F, 3A-3F, 4A-4H, and 5A-5J of Kohl et al. Kohl et al. does not teach air-gap structures in which the air gaps have non-rectangular cross-sections. In addition, Kohl et al. provides no disclosure, teaching, or suggestion with regard to air-gap structures in which the air gaps have tapered cross-sections, or are defined by tapered corner regions. Kohl et al. provides no disclosure, teaching, or suggestion with regard to structures that include three-dimensional air-regions having non-rectangular cross-sections, or in which the non-rectangular cross-sections of the three-dimensional air-regions have tapered cross-sections that may optionally be further defined by tapered corner regions.

Kohl et al. does not disclose, teach, or suggest a structure in which the formation thereof involves disposing onto a surface a sacrificial polymer layer that is itself photodefinable / self-imageable. Kohl et al. discloses forming a patterned layer of sacrificial material by conventional means that involve, for example, the subsequent application of a mask layer (e.g., of SiO₂) and a photoresist thereover, which are then sequentially etched and stripped in a multi-step process. See, for example, Figures 4A-4H and 5A-5J, and column 15, line 45 through column 16, line 65 of Kohl et al.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over Kohl et al. Reconsideration and withdrawal of the present rejections are requested.

Rejections of Claims 9 and 14-17

No prior art rejections are made against claims 9 and 14-17. However, claim 9 stands provisionally rejected on the grounds of nonstatutory obviousness-type double patenting over claims 1 and 6 of co-pending United States Patent Application No. 12/140,539. Claims 14-17 and 20-22 stand provisionally rejected on the grounds of nonstatutory obviousness-type double patenting over claims 11, 14-17, and 20 of co-pending United States Patent Application No. 11/451,144.

Terminal Disclaimers with regard to United States Patent Application Nos. 12/140,539 and 11/451,144 are included herewith. In light of the Terminal Disclaimers included herewith, the nonstatutory obviousness-type double patenting rejections of claims 9, 14-17 and 20-22 are believed to be overcome.

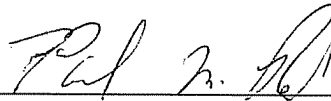
CONCLUSION

In light of the above amendments and remarks, reconsideration of the rejections and allowance of all of the presently pending claims are respectfully requested.

Respectfully submitted,

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